

2635494_1.TXT
SEQUENCE LISTING

<110> Clark, Georgina Jane
Hart, Derek Nigel Jo

<120> THERAPEUTIC AND DIAGNOSTIC AGENTS

<130> DAVI257.001APC

<140> US 10/536,677
<141> 2005-05-27

<150> PCT/AU2003/001586
<151> 2003-11-28

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Gly Pro Val Gly Gly Ser Leu Ser Val Gln Cys Arg Tyr Glu Lys Glu			
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His Arg Thr Leu Asn Lys Phe Trp Cys Arg Pro Pro Gln Ile Leu Arg			
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Cys Asp Lys Ile Val Glu Thr Lys Gly Ser Ala Gly Lys Arg Asn Gly			
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Leu Glu Asn Leu Thr Glu Glu Asp Ala Gly Thr Tyr Trp Cys Gly Val			
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Cys Arg Pro Pro Gln Ile Phe Leu Cys Asp Lys Ile Val Glu Thr Lys
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Gly Ser Ala Gly Lys Arg Asn Gly Arg Val Ser Ile Arg Asp Ser Pro
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Ala Asn Leu Ser Phe Thr Val Thr Leu Glu Asn Leu Thr Glu Glu Asp
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Ala Gly Thr Tyr Trp Cys Gly Val Asp Thr Pro Trp Leu Arg Asp Phe
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His Asp Pro Val Val Glu Val Glu Val Ser Val Phe Pro Ala Ser Thr
115 120 125

Ser Met Thr Pro Ala Ser Ile Thr Ala Ala Lys Thr Ser Thr Ile Thr
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130

135

140

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Val Gly Ala Ser Leu Leu Ala Trp Arg Met Phe Gln Lys Trp Ile Lys
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Trp Ile Lys Ala Gly Asp His Ser Glu Leu Ser Gln Asn Pro Lys Gln
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Trp Pro Leu Gln Glu Lys Pro Ala Pro Pro Arg Glu Val Glu Val Glu
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Trp Cys Arg Gly Gln Tyr Asp Thr Ser Cys Glu Ser Ile Val Glu Thr
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Lys Gly Glu Glu Lys Val Glu Arg Asn Gly Arg Val Ser Ile Arg Asp
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His Pro Glu Ala Leu Ala Phe Thr Val Thr Met Gln Asn Leu Asn Glu
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Asp Asp Ala Gly Ser Tyr Trp Cys Lys Ile Gln Thr Val Trp Val Leu
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Asp Ser Trp Ser Arg Asp Pro Ser Asp Leu Val Arg Val Tyr Val Ser
115 120 125

Pro Ala Ile Thr Thr Pro Arg Arg Thr Thr His Pro Ala Thr Pro Pro
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Leu Thr Gln Asn Ser Gly Phe Arg Leu Ser Ser Pro His Phe Leu Leu
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Cys Asn Ile Leu Val Lys Thr Asn Gly Ser Glu Gln Glu Val Lys Lys
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Asn Arg Val Ser Ile Arg Asp Asn Gln Lys Asn His Val Phe Thr Val
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Thr Met Glu Asn Leu Lys Arg Asp Asp Ala Asp Ser Tyr Trp Cys Gly
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Thr Glu Arg Pro Gly Ile Asp Leu Gly Val Lys Val Gln Val Thr Ile
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Asn Pro Ala Gln Cys Leu Ser Leu Leu Pro Thr Asp Asp Arg Val Met
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Cys	Arg	Gln	Pro	Cys	Leu	Pro	Ile	Trp	His	Glu	Met	Val	Glu	Thr	Gly
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Gly	Ser	Glu	Gly	Val	Val	Arg	Ser	Asp	Gln	Val	Ile	Ile	Thr	Asp	His
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Pro	Gly	Asp	Leu	Thr	Phe	Thr	Val	Thr	Leu	Glu	Asn	Leu	Thr	Ala	Asp
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Pro Thr Arg Pro Ser Gln Cys Gln Gly Ser Leu Pro Ser Ser Thr Cys
145 150 155 160

Phe Leu Leu Leu Pro Leu Leu Lys Val Pro Leu Leu Leu Ser Ile Leu
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Arg Gly Ser Glu Gln Gly Glu Lys Ser Asp Arg Val Ser Ile Lys Asp
65 70 75 80

Asn Gln Lys Asp Arg Thr Phe Thr Val Thr Met Glu Gly Leu Arg Arg
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Asp Asp Ala Asp Val Tyr Trp Cys Gly Ile Glu Arg Arg Gly Pro Asp
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Leu Gly Thr Gln Val Lys Val Ile Val Asp Pro Glu Gly Ala Ala Ser
115 120 125

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35

40

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Thr Gly Asn Asp Leu Gly Val Thr Val Gln Val Thr Ile Asp Pro Ala
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<210> 16

<211> 287

<212> PRT

<213> mouse

<400> 16

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Glu	Ala	Leu	Lys	Gly	Pro	Lys	Glu	Ile	Ser	Gly	Phe	Glu	Gly	Asp	Thr
			20				25					30			

val	Ser	Leu	Arg	Cys	Thr	Tyr	Val	Glu	Lys	Met	Lys	Glu	His	Arg	Lys
35						40				45					

Tyr	Trp	Cys	Arg	Gln	Gly	Gly	Ile	Leu	Val	Ser	Arg	Cys	Gly	Asp	Ile
50					55					60					

val	Tyr	Ala	Asn	Gln	Asp	Gln	Glu	Val	Thr	Arg	Gly	Arg	Met	Ser	Ile
65					70				75				80		

Arg	Asp	Ser	Pro	Gln	Glu	Leu	Ser	Met	Thr	Val	Ile	Met	Arg	Asp	Leu
						85			90			95			

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Thr Leu Lys Asp Ser Gly Lys Tyr Trp Cys Gly Ile Asp Arg Leu Gly
100 105 110

Arg Asp Glu Ser Phe Glu Val Thr Leu Ile Val Phe Pro Gly Ser Ser
115 120 125

Arg Pro Val Val Trp Leu Pro Leu Thr Thr Pro Gln Asp Ser Arg Ala
130 135 140

Val Ala Ser Ser Val Ser Lys Pro Ser Val Ser Ile Pro Met Val Arg
145 150 155 160

Met Met Ala Pro Val Leu Ile Leu Leu Ser Leu Leu Leu Ala Ala Gly
165 170 175

Leu Ile Ala Phe Gly Ser His Met Leu Arg Trp Arg Lys Lys Ala Trp
180 185 190

Leu Ala Thr Glu Thr Gln Lys Asn Glu Lys Val Tyr Leu Glu Thr Ser
195 200 205

Leu Pro Gly Asn Gly Trp Thr Thr Glu Asp Ser Thr Ile Asp Leu Ala
210 215 220

Val Thr Pro Glu Cys Leu Arg Asn Leu Asn Pro Ser Ala Val Pro Ser
225 230 235 240

Pro Glu Thr Gln Asn Leu Ser Gln Ser Thr Glu Glu Glu Ala Ala
245 250 255

Arg Ser Leu Asp Asp Asp Lys Glu Asp Val Met Ala Pro Pro Pro Leu
260 265 270

Gln Met Ser Ala Glu Glu Leu Ala Phe Ser Glu Phe Ile Ser Val
275 280 285

<210> 17

<211> 1111

<212> DNA

<213> mouse

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ttttggcttc caggctgtgt ccctctgcat ggtcccagca ccatgacagg aagtgtgggt 120

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gcttaggagtg	gcagagtgac	catcagggac	catccagaca	acctcacctt	tacagtgacc	300
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ttttagtggct	ccttggggtt	cgataagtac	ttcaagattg	agttgtctgt	ggttccaagt	420
gaggaccagg	gaccaacact	agagacacct	gtggtgtcca	ccagtctgcc	taccaagggt	480
ccgccttag	gatccaacac	agaggaccgc	cgtgagcatg	actattccca	gggcttgagg	540
ctcccagcgc	tgttgtctgt	gttagctctc	ctgctgttcc	tgttgttggg	gacctctctg	600
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acgtggtctc	tgagggaaaga	gccggtgcta	ccaagtcagg	tagaagtgg	ggaatatagc	780
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caggattctc	acgccaatgg	agattctctt	catcaacctc	aggaccagaa	agcagagtac	900
agtgagatcc	agaagcccag	aaaaggactc	tctgacctt	acctgtgact	ccttgcacc	960
tgatcccttc	agtggtgact	accaggttcc	aaggctccct	gctggctgct	gccctcaatg	1020
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<210> 18

<211> 314

<212> PRT

<213> mouse

<400> 18

Met Thr Gln Leu Ala Ser Ala Val Trp Leu Pro Thr Leu Leu Leu
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Leu Leu Leu Phe Trp Leu Pro Gly Cys Val Pro Leu His Gly Pro Ser
 20 25 30

Thr Met Thr Gly Ser Val Gly Gln Ser Leu Ser Val Ser Cys Gln Tyr
 35 40 45

Glu Glu Lys Phe Lys Thr Lys Asp Lys Tyr Trp Cys Arg Gly Ser Leu
 50 55 60

2635494_1.TXT

Lys Val Leu Cys Lys Asp Ile Val Lys Thr Ser Ser Ser Glu Glu Ala
65 70 75 80

Arg Ser Gly Arg Val Thr Ile Arg Asp His Pro Asp Asn Leu Thr Phe
85 90 95

Thr Val Thr Tyr Glu Ser Leu Thr Leu Glu Asp Ala Asp Thr Tyr Met
100 105 110

Cys Ala Val Asp Ile Ser Leu Phe Asp Gly Ser Leu Gly Phe Asp Lys
115 120 125

Tyr Phe Lys Ile Glu Leu Ser Val Val Pro Ser Glu Asp Pro Gly Pro
130 135 140

Thr Leu Glu Thr Pro Val Val Ser Thr Ser Leu Pro Thr Lys Gly Pro
145 150 155 160

Ala Leu Gly Ser Asn Thr Glu Asp Arg Arg Glu His Asp Tyr Ser Gln
165 170 175

Gly Leu Arg Leu Pro Ala Leu Leu Ser Val Leu Ala Leu Leu Phe
180 185 190

Leu Leu Val Gly Thr Ser Leu Leu Ala Trp Arg Met Phe Gln Lys Arg
195 200 205

Leu Val Lys Ala Asp Arg His Pro Glu Leu Ser Gln Asn Leu Arg Gln
210 215 220

Ala Ser Glu Gln Asn Glu Cys Gln Tyr Val Asn Leu Gln Leu His Thr
225 230 235 240

Trp Ser Leu Arg Glu Glu Pro Val Leu Pro Ser Gln Val Glu Val Val
245 250 255

Glu Tyr Ser Thr Leu Ala Leu Pro Gln Glu Glu Leu His Tyr Ser Ser
260 265 270

Val Ala Phe Asn Ser Gln Arg Gln Asp Ser His Ala Asn Gly Asp Ser
275 280 285

Leu His Gln Pro Gln Asp Gln Lys Ala Glu Tyr Ser Glu Ile Gln Lys
290 295 300

Pro Arg Lys Gly Leu Ser Asp Leu Tyr Leu
305 310

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<210> 19

<211> 711

<212> DNA

<213> mouse

<400> 19
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711

<210> 20

<211> 236

<212> PRT

<213> mouse

<400> 20

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Ser Ile Gln Gly Pro Ala Leu Val Arg Gly Pro Glu Gln Gly Ser Val
20 25 30

Thr Val Gln Cys Arg Tyr Ser Ser Arg Trp Gln Thr Asn Lys Lys Trp
35 40 45

Trp Cys Arg Gly Ala Ser Trp Ser Thr Cys Arg Val Leu Ile Arg Ser
50 55 60

2635494_1.TXT

Thr Gly Ser Glu Lys Glu Thr Lys Ser Gly Arg Leu Ser Ile Arg Asp
65 70 75 80

Asn Gln Lys Asn His Ser Phe Gln Val Thr Met Glu Met Leu Arg Gln
85 90 95

Asn Asp Thr Asp Thr Tyr Trp Cys Gly Ile Glu Lys Phe Gly Thr Asp
100 105 110

Arg Gly Thr Arg Val Lys Val Asn Val Tyr Phe Gly His Met Gln Thr
115 120 125

Phe Phe Ser Ser Ala Ala Thr Leu Thr Pro Glu Arg Ala Ala Glu Met
130 135 140

Trp Val Lys Ile Pro Cys Arg Leu Leu Ile Asn Phe Pro Gly Pro Leu
145 150 155 160

Trp Thr Ala Val Gln Thr Trp Cys Leu Leu Thr Cys Arg Arg Gly Leu
165 170 175

Glu Ala Ser Leu Val Gly Ala Phe Val Gly Gly Leu Met Gln Val Pro
180 185 190

Ser Cys Ser Leu Ala Val Ala Ile Phe Thr Phe Val Leu Thr Leu Thr
195 200 205

Pro Pro Ser Ser Gln Glu Ala His Ser Thr Pro Ser Ser His Ser Ala
210 215 220

Pro Val Ala Ser Lys Glu Glu Met Asn Arg Leu Phe
225 230 235

<210> 21

<211> 819

<212> DNA

<213> mouse

<400> 21
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acaagaaggt ggttgcctgg gctctgttac acacatctgg attccagcag cgacctggag 120
ttttctggag acagtaccca gtgaggcagg aggatgaggc tatgtgcagg tctgctcctt 180
ctctgcttcc aaggttgttt gtctctgacg gcccctggct ctgtgtctgg ctacgttagga 240

2635494_1.TXT

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gaaaagagga	gtggcccagt	gtccatcaga	gaccatgctg	cgaactccac	catcacagtg	420
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gagtgaccca	tccaagaact	atgaagtgaa	gcatcccagg	aatgccctgg	gaggaactca	780
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<210> 22

<211> 181

<212> PRT

<213> mouse

<400> 22

Met	Arg	Leu	Cys	Ala	Gly	Leu	Leu	Leu	Leu	Cys	Phe	Gln	Gly	Cys	Leu
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Ser	Leu	Thr	Gly	Pro	Gly	Ser	Val	Ser	Gly	Tyr	Val	Gly	Gly	Ser	Leu
				20				25				30			

Arg	Val	Gln	Cys	Gln	Tyr	Ser	Pro	Ser	Tyr	Lys	Gly	Tyr	Met	Lys	Tyr
		35			40					45					

Trp	Cys	Arg	Gly	Pro	His	Asp	Thr	Thr	Cys	Lys	Thr	Ile	Val	Glu	Thr
					50		55			60					

Asp	Gly	Ser	Glu	Lys	Glu	Lys	Arg	Ser	Gly	Pro	Val	Ser	Ile	Arg	Asp
				65		70			75				80		

His	Ala	Ala	Asn	Ser	Thr	Ile	Thr	Val	Ile	Met	Glu	Asp	Leu	Ser	Glu
					85				90				95		

Asp	Asp	Ala	Gly	Ser	Tyr	Trp	Cys	Lys	Ile	Gln	Thr	Ser	Phe	Ile	Trp
					100			105					110		

Asp	Ser	Trp	Ser	Arg	Asp	Pro	Ser	Val	Ser	Val	Arg	Val	Asn	Val	Phe
				115				120			125				

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Pro Val Asn Ser Gly Gln Asn Leu Arg Ile Ser Thr Asn Val Met Phe
 130 135 140

Ile Phe Gln Leu Trp Ser Leu Leu Ser Ser Ile Gln Phe Gln Val Leu
 145 150 155 160

Val Phe Leu Lys Leu Pro Leu Phe Leu Ser Met Leu Cys Ala Ile Phe
 165 170 175

Trp Val Asn Arg Leu
 180

<210> 23

<211> 2487

<212> DNA

<213> mouse

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gagacatcta ctggaatcat tcccttagta tctgagacag ggtttcta at tgaccagcac	960	
ctttgtgtgg taggtcagac agctggccag ggaactccag ggatctccct gcctctacca	1020	
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<210> 24

<211> 221

<212> PRT

<213> mouse

<400> 24

Met Trp Gln Phe Ser Ala Leu Leu Leu Phe Phe Leu Pro Gly Cys Cys
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Thr Ala Gln Asp Ser Val Thr Gly Pro Glu Glu Val Ser Gly Gln Glu
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Gln Gly Ser Leu Thr Val Gln Cys Arg Tyr Ser Ser Tyr Trp Lys Gly
35 40 45

Tyr Lys Lys Tyr Trp Cys Arg Gly Val Pro Gln Arg Ser Cys Asp Ile
50 55 60

Leu Val Glu Thr Asp Lys Ser Glu Gln Leu Val Lys Lys Asn Arg Val
65 70 75 80

Ser Ile Arg Asp Asn Gln Arg Asp Phe Ile Phe Thr Val Thr Met Glu
85 90 95

Asp Leu Arg Met Ser Asp Ala Gly Ile Tyr Trp Cys Gly Ile Thr Lys
100 105 110

Gly Gly Pro Asp Pro Met Phe Lys Val Asn Val Asn Ile Asp Gln Ala
115 120 125

Pro Lys Ser Ser Met Met Thr Thr Thr Ala Thr Val Leu Lys Ser Ile
130 135 140

Gln Pro Ser Ala Glu Asn Thr Gly Lys Glu Gln Val Thr Gln Ser Lys
145 150 155 160

Glu Val Thr Gln Ser Arg Pro His Thr Arg Ser Leu Leu Ser Ser Ile
165 170 175

Tyr Phe Leu Leu Met Val Phe Val Glu Leu Pro Leu Leu Leu Ser Met
180 185 190

Leu Ser Ala Val Leu Trp Val Thr Arg Pro Gln Arg Cys Phe Gly Arg
195 200 205

Gly Glu Asn Asp Leu Val Lys Thr His Ser Pro Val Ala
210 215 220

<210> 25

<211> 1307

<212> DNA

<213> mouse

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<400> 26

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Cys Thr Ala Glu Asp Pro Val Thr Gly Pro Glu Glu Val Ser Gly Gln
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20

25

30

Glu Gln Gly Ser Leu Thr Val Gln Cys Arg Tyr Thr Ser Gly Trp Lys
 35 40 45

Asp Tyr Lys Lys Tyr Trp Cys Gln Gly Val Pro Gln Arg Ser Cys Lys
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Thr Leu Val Glu Thr Asp Ala Ser Glu Gln Leu Val Lys Lys Asn Arg
 65 70 75 80

Val Ser Ile Arg Asp Asn Gln Arg Asp Phe Ile Phe Thr Val Thr Met
 85 90 95

Glu Asp Leu Arg Met Ser Asp Ala Gly Ile Tyr Trp Cys Gly Ile Thr
 100 105 110

Lys Val Pro Thr Met Pro Pro Ile Thr Ser Thr Thr Ile Phe Thr
 115 120 125

Val Thr Thr Thr Val Lys Glu Thr Ser Met Phe Pro Thr Leu Thr Ser
 130 135 140

Tyr Tyr Ser Asp Asn Gly His Gly Gly Asp Ser Gly Gly Glu
 145 150 155 160

Asp Gly Val Gly Asp Gly Phe Leu Asp Leu Ser Val Leu Leu Pro Val
 165 170 175

Ile Ser Ala Val Leu Leu Leu Leu Leu Val Ala Ser Leu Phe Ala
 180 185 190

Trp Arg Met Val Arg Arg Gln Lys Lys Asp Leu Ser Leu Lys Gln Pro
 195 200 205

Arg Thr Ser Pro Gly Ser Ser Trp Lys Lys Gly Ser Ser Met Ser Ser
 210 215 220

Ser Gly Lys Asp His Gln Glu Glu Val Glu Tyr Val Thr Met Ala Pro
 225 230 235 240

Phe Pro Arg Glu Glu Val Ser Tyr Ala Ala Leu Thr Leu Ala Gly Leu
 245 250 255

Gly Gln Glu Pro Thr Tyr Gly Asn Thr Gly Cys Pro Ile Thr His Val
 260 265 270

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Pro Arg Thr Gly Leu Glu Glu Glu Thr Thr Glu Tyr Ser Ser Ile Arg
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Arg Pro Leu Pro Ala Ala Met Pro
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Gly Cys Cys Thr Ala Gln Asp Pro Val Thr Gly Pro Glu Glu Val Ser
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Gly Gln Glu Gln Gly Ser Leu Thr Val Gln Cys Arg Tyr Asp Ser Gly
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Trp Lys Asp Tyr Lys Lys Tyr Trp Cys Arg Gly Ala Tyr Trp Lys Ser
35 40 45

Cys Glu Ile Leu Val Glu Thr Asp Ala Ser Glu Gln Leu Val Lys Glu
50 55 60

Asn Arg Val Ser Ile Arg Asp Asp Gln Thr Asp Phe Ile Phe Thr Val
65 70 75 80

Thr Met Glu Asp Leu Arg Met Ser Asp Ala Asp Ile Tyr Trp Cys Gly
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Ile Thr Lys Ala Gly Thr Asp Pro Met Phe Lys Val Asn Val Asn Ile
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Asp Pro

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<211> 295

<212> PRT

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Ser Ile Val Thr Gln Ile Thr Gly Pro Thr Thr Val Asn Gly Leu Glu
20 25 30

Arg Gly Ser Leu Thr Val Gln Cys Val Tyr Arg Ser Gly Trp Glu Thr
35 40 45

Tyr Leu Lys Trp Trp Cys Arg Gly Ala Ile Trp Arg Asp Cys Lys Ile
50 55 60

Leu Val Lys Thr Ser Gly Ser Glu Gln Glu Val Lys Arg Asp Arg Val
65 70 75 80

Ser Ile Lys Asp Asn Gln Lys Asn Arg Thr Phe Thr Val Thr Met Glu
85 90 95

Asp Leu Met Lys Thr Asp Ala Asp Thr Tyr Trp Cys Gly Ile Glu Lys
100 105 110

Thr Gly Asn Asp Leu Gly Val Thr Val Gln Val Thr Ile Asp Pro Ala
115 120 125

Pro Val Thr Gln Glu Glu Thr Ser Ser Ser Pro Thr Leu Thr Gly His
130 135 140

His Leu Asp Asn Arg His Lys Leu Leu Lys Leu Ser Val Leu Leu Pro
145 150 155 160

Leu Ile Phe Thr Ile Leu Leu Leu Leu Val Ala Ala Ser Leu Leu
165 170 175

Ala Trp Arg Met Met Lys Tyr Gln Gln Lys Gly Glu Arg Thr Trp Val
180 185 190

Leu Gln Pro Leu Glu Gly Asp Leu Cys Tyr Ala Asp Leu Thr Leu Gln
195 200 205

Leu Ala Gly Thr Ser Pro Gln Lys Ala Thr Thr Lys Leu Ser Ser Ala
210 215 220

Gln Val Asp Gln Val Glu Val Glu Tyr Val Ala Ala Gly Met Ser Pro
225 230 235 240

Glu Gln Thr Met Ala Ser Leu Pro Lys Glu Asp Ile Ser Tyr Ala Ser
245 250 255

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Leu Thr Leu Gly Ala Glu Asp Gln Glu Pro Thr Tyr Cys Asn Met Gly
260 265 270

His Leu Ser Ser His Leu Pro Gly Arg Gly Pro Glu Glu Pro Thr Glu
275 280 285

Tyr Ser Thr Ile Ser Arg Pro
290 295